GOV 1006: Milestone 5

Paper Replication

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0.1 Introduction

The paper I have chosen for my replication project is entitled "Unemployment, Trust in Government, and Satisfaction with Democracy: An Empirical Investigation" (Bauer (2018)).[1] It was authored by Paul C. Bauer in 2018. The purpose of the paper is to evaluate how unemployment affects a person's trust in the government and their views towards democracy in general. Bauer begins with macro level data from the Netherlands and Switzerland to construct his analysis but expands to utilize panel data so as to evaluate the relationship on an individual level.

The aim of Bauer's paper is to show how unemployment influences a person's trust in government, satisfaction with democracy, and life satisfaction in general. Bauer also controls for variations in age, education, and party membership. Because the link between life satisfaction and unemployment is somewhat more widely studied, Bauer uses that as a base metric to evaluate the magnitude of the other effects upon. All three dependent variables (trust in government, satisfaction in democracy, and life satisfaction) are measured on a 1-10 scale with 0 indicating no trust or satisfaction and 10 indicating complete trust or satisfaction.

Bauer finds that there is no consistent effect between unemployment and trust in the government or satisfaction with democracy. These findings contradict his initial hypothesis that unemployment would lead people to have lower levels of trust and satisfaction with the government and democratic institutions. However, Bauer does find that unemployment is negatively related to life satisfaction. People who are unemployed are generally less satisfied with their lives than those who are employed. This finding is consistent with previous research on the topic. Moving forward, Bauer hopes to increase the sample size of the studied group to further explore heterogenous treatment effects across various subgroups of individuals. For example, he hypothesizes that the effect of unemployment on attitudes may be greater among people traditionally disadvantaged in the labor market such as women and workers of a lower-class.

0.2 Replication

In the below section, I make use of the data collected by Bauer to conduct an analysis on how unemployment, age, and education level affect a person's life satisfaction. I run three regressions, each adding an additional explanatory variable in the above ordering. This is a similar analysis to that conducted in Table 3 of his paper, though I only include the LISS data from The Netherlands. My regressions make use of several packages including the tidyverse, stats, and stargazer (Wickham (2017); Hlavac (2018)). The inspiration for my analysis comes from the King et. al. article entitled "Making the Most of Statistical Analyses: Improving Interpretation and Presentation" (Gary King and Wittenberg (2000)).

[1] The replication materials for this paper and my subsequent analyses can be found at my Github Repo

Table 1: Effects of Unemployment on Life Satisfaction

	Dependent variable:		
	Life Satisfaction		
	(1)	(2)	(3)
Unemployment	-0.839^{***}	-0.859^{***}	-0.857^{***}
	(0.047)	(0.048)	(0.048)
Age		0.004^{***}	0.004^{***}
		(0.001)	(0.001)
Education			0.014^{**}
			(0.006)
Constant	7.529^{***}	7.343^{***}	7.286^{***}
	(0.009)	(0.031)	(0.041)
Observations	21,376	21,376	21,376
R^2	0.014	0.016	0.016
Adjusted R^2	0.014	0.016	0.016
Residual Std. Error	1.254 (df = 21374)	1.253 (df = 21373)	1.253 (df = 21372)
F Statistic	312.918^{***} (df = 1; 21374)	176.112^{***} (df = 2; 21373)	119.038^{***} (df = 3; 21372)
Note:			*p<0.1; **p<0.05; ***p<0.01
			Data from Bauer 2018

The results of my regressions confirm the general findings of Bauer. Like he, I also found that unemployment negatively effects a person's life satisfaction. I did not test the effects of unemployment on trust in government and satisfaction in democracy though I will do so in future analyses.

0.3 Appendix

Table 2: Unemployment across Years

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SHP: employed	4913	4557	4232	3649	3350	5255	4236	4248	4422	4,384	4,457	4,685	4,694	4,576	4,388	
SHP: unemployed	121	79	76	94	104	158	110	123	92	80	116	110	110	82	115	
LISS: employed										4,273	3,422	3,548	2,872	3,181	2,863	3367
LISS: unemployed										74	82	123	87	114	150	183

LISS = Longitudinal Internet Studies for the Social Sciences; SHP = Swiss Household Panel.

The actual table from the paper is below:

Table 1. Unemployment across Years.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SHP: employed	4,913	4,557	4,232	3,649	3,350	5,255	4,236	4,248	4,422	4,384	4,457	4,685	4,694	4,576	4,388	
SHP: unemployed	121	79	76	94	104	158	110	123	92	80	116	110	110	82	115	
LISS: employed										4,273	3,422	3,548	2,872	3,181	2,863	3,367
LISS: unemployed										74	82	123	87	114	150	183

Note: LISS = Longitudinal Internet Studies for the Social Sciences; SHP = Swiss Household Panel.

This photo is displayed using a function from the knitr package (Xie (2020)).

References

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